

New York State Department of Transportation

Yellow Flag NB2358W017

By: Alex Abreu

Flag Date: June 01, 2023

Superseding Information:

This flag supersedes: YF NB22CTW007

Structure Information

BIN: 1065318

Feature Carried: 278I278IX2M23027

Feature Crossed: 6TH AVENUE

Orientation: 8 - NORTHWEST

Region: 11 - NEW YORK CITY

County: KINGS

Political Unit: City of NEW YORK

Approximate Year Built: 1962

Posted Load Matches Inventory : Yes

Bridge Load Posting (Tons) : Not Posted for Load

Primary Owner: New York State Department of Transportation

Primary Maintenance Responsibility: 12 - State - Subcontracted to another Party

Typical or Main Span Type: 3 - Steel, 02 - Stringer/Multi-Beam or Girder

This Bridge is not a Ramp

Number of Spans: 322

Verbal Notification Information

Person Notified: Muhammad Mubeen

Date: June 02, 2023 9:53:00 AM

Of: NYSDOT Region 11

Signature Information

Signature: Alex Abreu, P.E. 099761-1

Date: June 08, 2023

Reviewed By: Robert Kemp

Date: June 08, 2023

Attachments: 8

Flagged Elements

Parent Element	Element	Total Quantity	Unit
Span Number : 164			
	113 - Steel Stringer	156	ft

Flagged Condition Description

This Yellow Flag NB2358W017 supersedes previously issued Yellow Flag No. NB22CTW007.

Location: Stringer S1 in Span 164 at Pier 164 between 38th-39th Street.

Description:

The transverse support beam connected to the left face of Girder G1 supporting the end of Stringer S1 in Span 164 adjacent to Pier 164 exhibits a 4-1/2" long crack (previously 4" long) in the lower web (Photo 5) and 13" long (no changes since previous inspection) sheared/misaligned portion of the upper web (Photos 6 and 7). The sheared/misaligned portion and crack are both located directly below Stringer S1. The crack in the web is located directly above the bottom flange. The sheared/misaligned portion of the web is located right below the top flange angles. The top of the sheared/misaligned portion of the web is displaced towards the begin side (previously the portion of the web was leaning towards the end side). The transverse beam exhibits 1/16" pitting for the full length of the lower web (approximately 31" long) for 1" high and in the upper web adjacent to the connection to the Girder G1 web for 4"H x 3"W (Photo 8). The connection angle between the transverse support beam and web of Girder G1 is in good condition. The bearing plate between the bottom of Stringer S1 and top of the transverse support beam is in good condition. (refer to Yellow Flag Condition Sketch Photo #2 for more details)

There are no significant changes in the condition since the previous inspection.

Notes:

1. The bottom flange of Stringer S1 beyond the bearing area (end side) at the transverse support beam exhibits up to 40% section loss for 2" long for the full width of the flange with 1" diameter corrosion hole at each side. The bottom flange at the begin side of the bearing exhibits 15% section loss with 1/2" diameter corrosion hole at the edge of the flange at both sides. The vertical leg of the bottom flange angle along the web exhibits 1/8" deep section loss for 18" long at both faces with first five rivets exhibiting 25% rivet head loss at the left face and 50% rivet head loss at the right face. The left bearing stiffener exhibits 2" diameter corrosion hole at the bottom of the stiffener. The additional left web stiffener approximately 12" from the bearing exhibits a 1" diameter corrosion hole at the bottom of the stiffener.
2. The superstructure members within Span 164 have been cleaned and newly painted.
3. The Stringer S1 supports the barrier/railing above on I-278 WB direction.
4. A double left lane closure on 3rd Avenue Westbound travel direction with 35' bucket truck is required to access the flagged location.

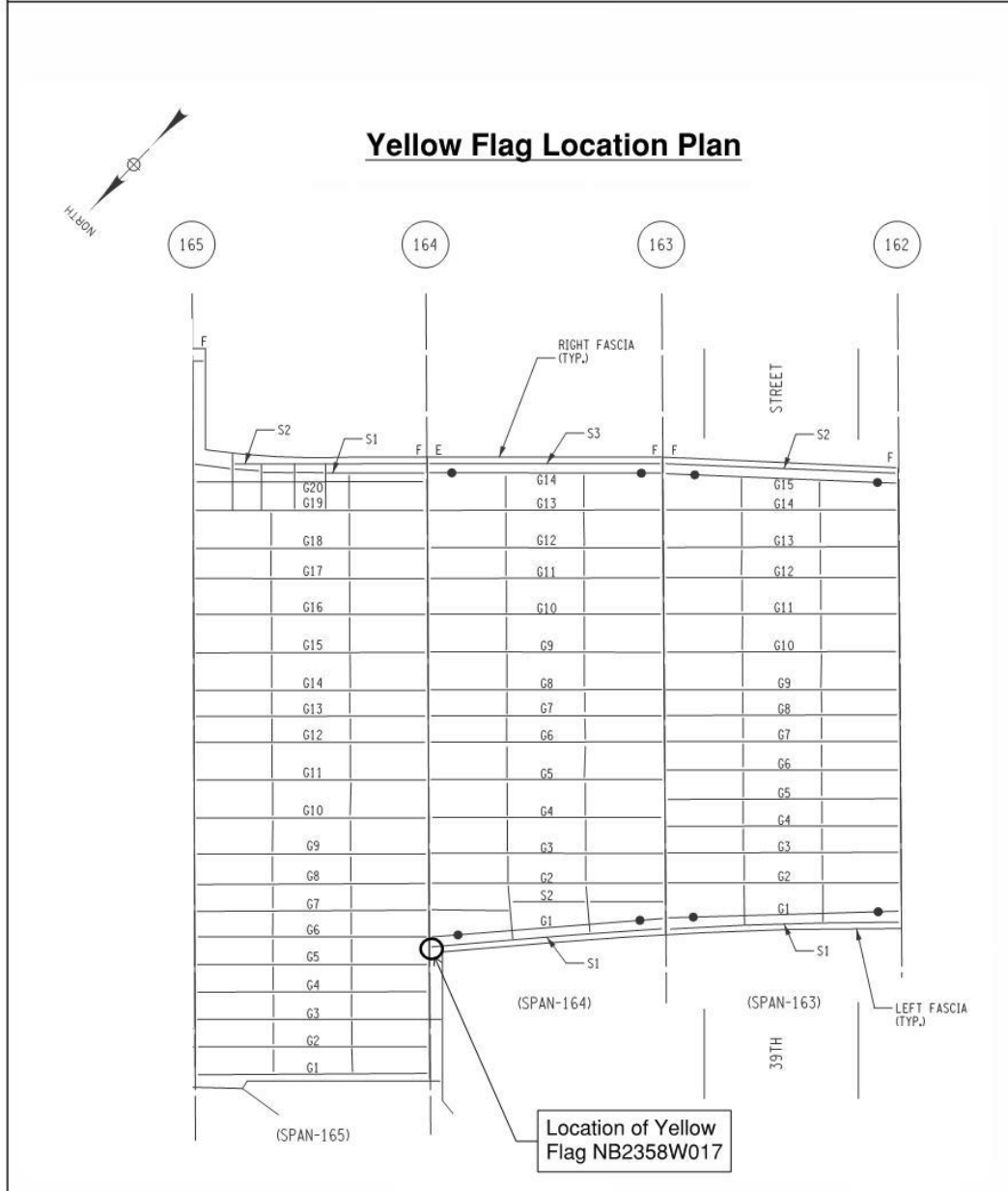
Flag PhotographsPhoto Number: **1**Photo Filename: **23_Flag Location Plan.jpg**Gowanus Expressway
2023 Biennial Inspection - Field SketchBIN: 1065318Team: AA/TSDate: 06/01/2023Span: 164Location: Transverse Beam Below S1 at Pier 164**wsp****Attachment Description: Flag Location Plan**

Photo Number: 2

Photo Filename: 23_Span 164_Pier 164_Transverse Beam below

Gowanus Expressway
2023 Biennial Inspection - Field Sketch

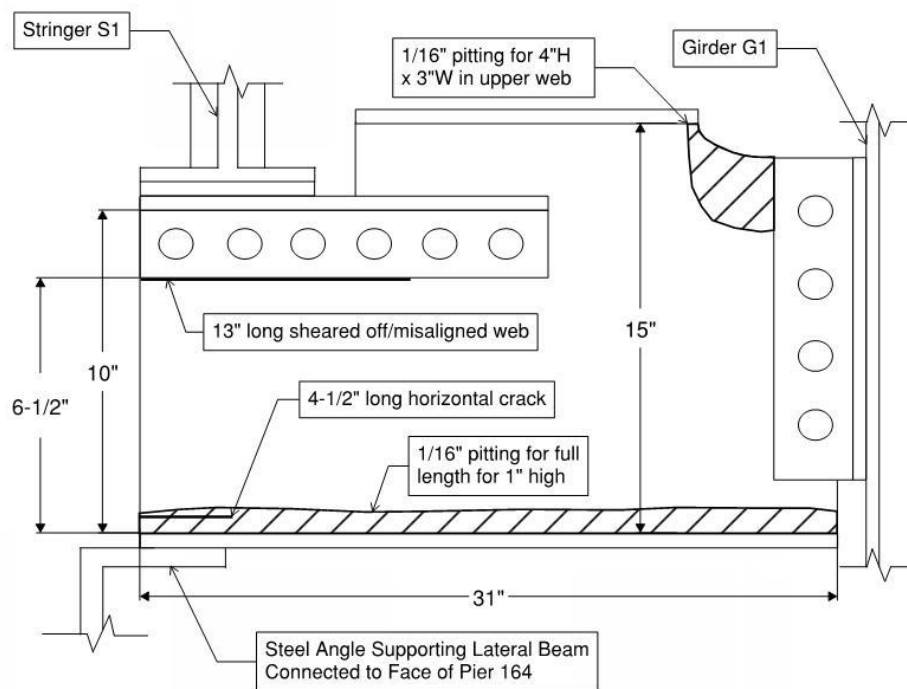
BIN: 1065318

Team: AA/TS

Date: 06/01/2023

Span: 164

Location: Transverse Beam Below S1 at Pier 164



Begin Face of Lateral Support
Beam Below Stringer S1

SCALE: N.T.S

Notes:

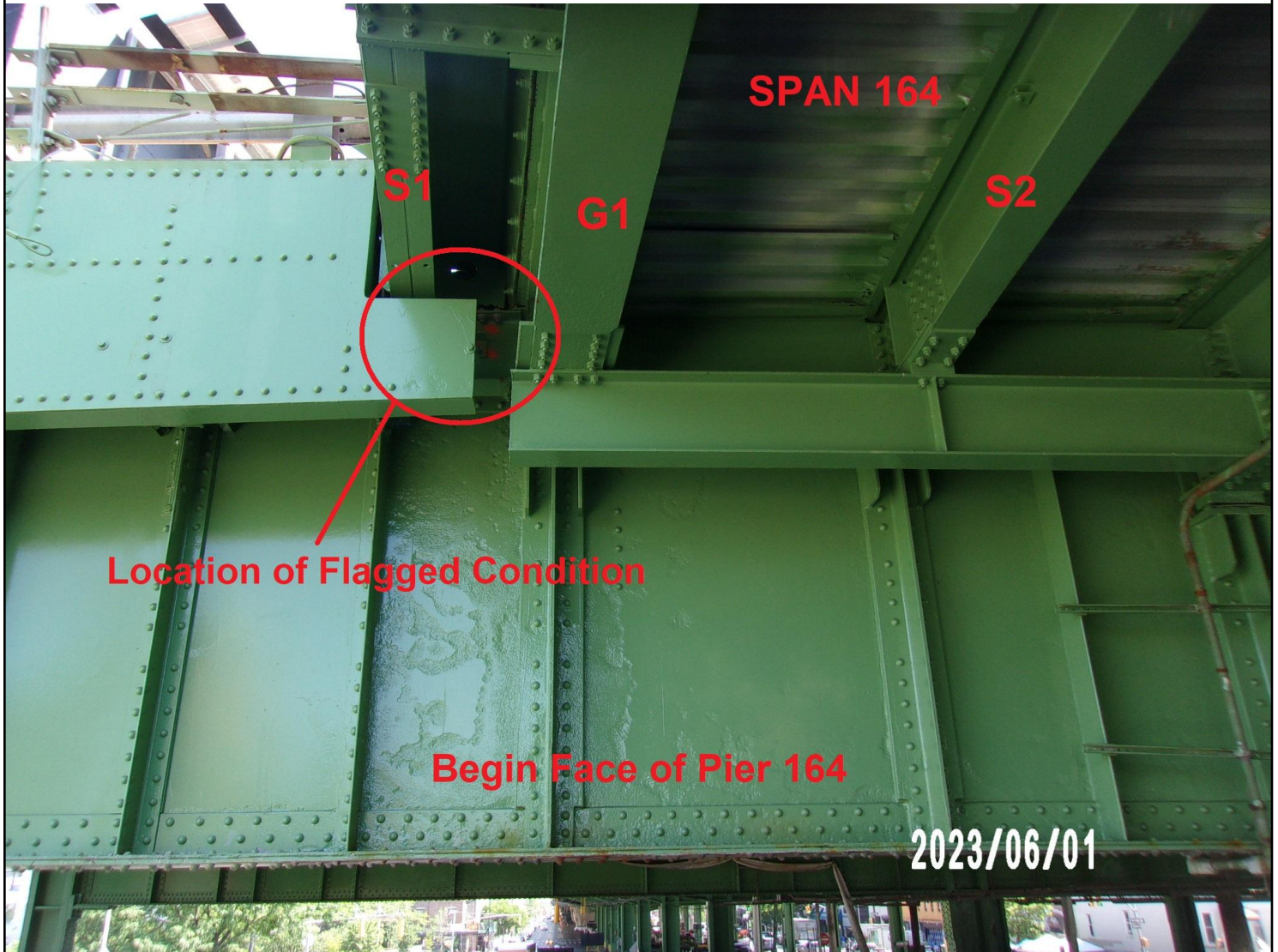
-As-measured web thickness of lateral support beam is approximately 0.25"

wsp

Attachment Description: Flag Condition Sketch

Photo Number: 3

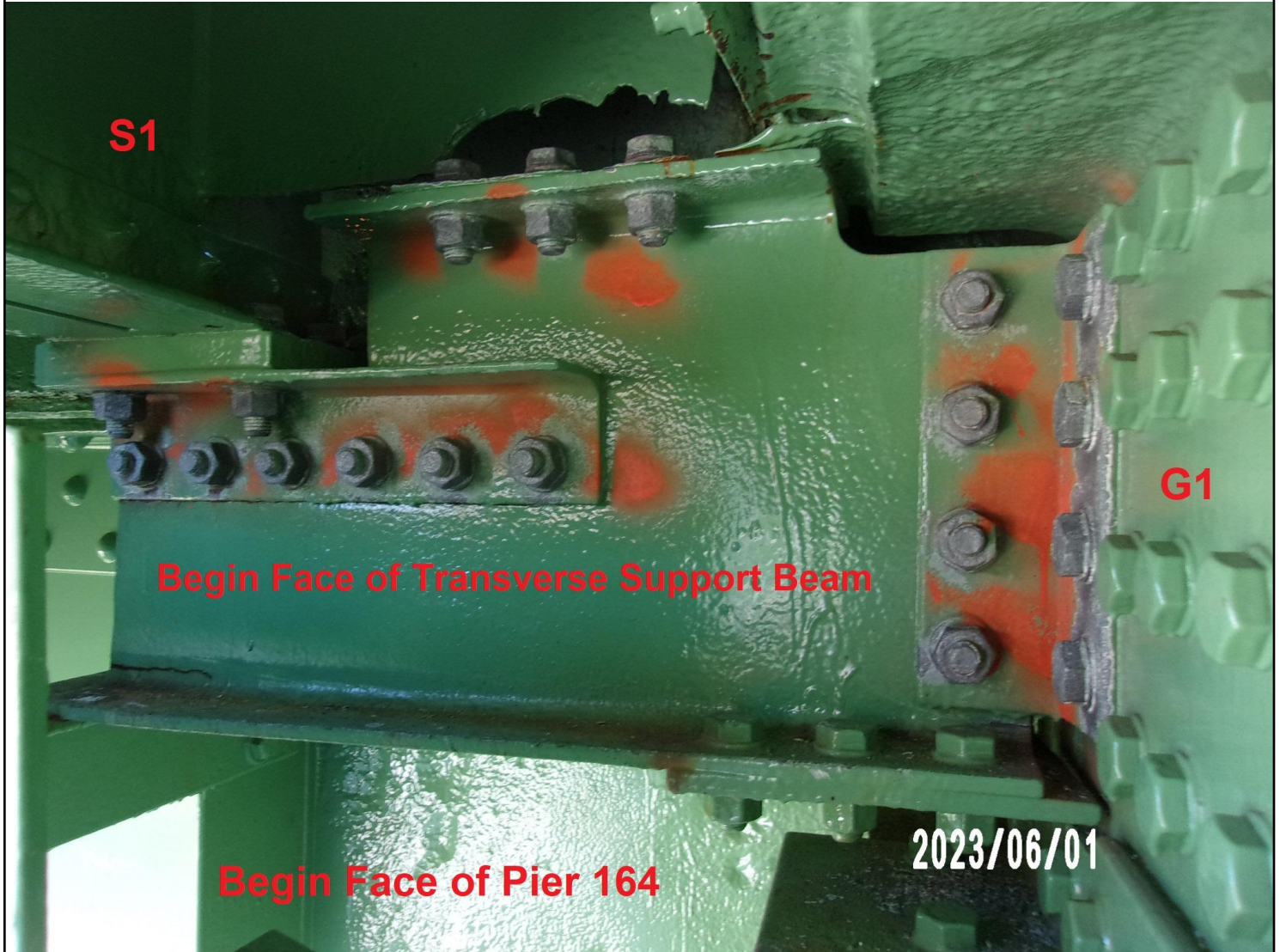
Photo Filename: 23_113_7450.JPG



Attachment Description: General view of the flagged condition at the transverse support beam below Stringer S1 in Span 164 at Pier 164. Looking End.

Photo Number: 4

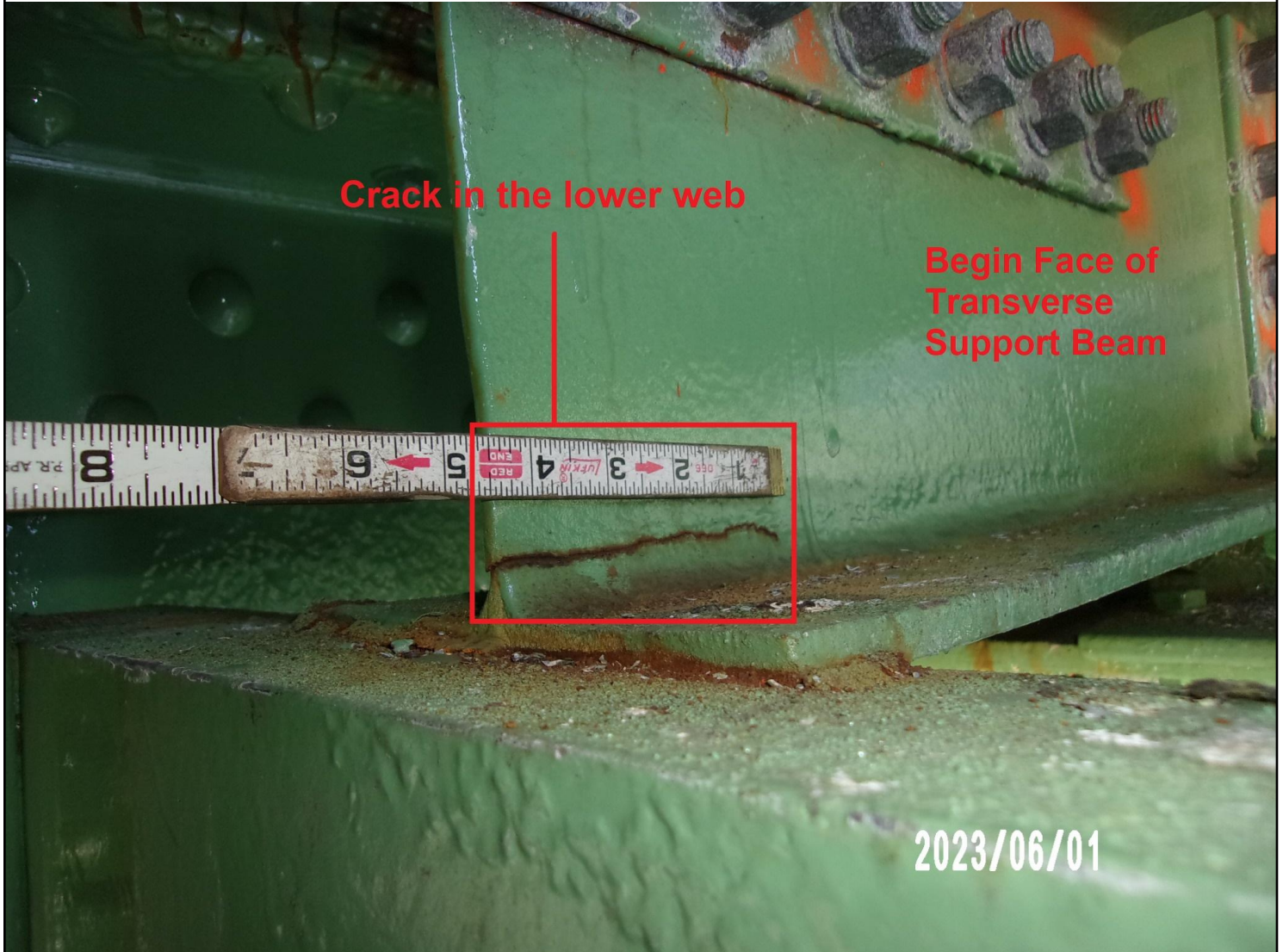
Photo Filename: 23_113_7441.JPG



Attachment Description: Close up general view of the flagged condition at the transverse support beam below Stringer S1 in Span 164 at Pier 164. Looking End.

Photo Number: 5

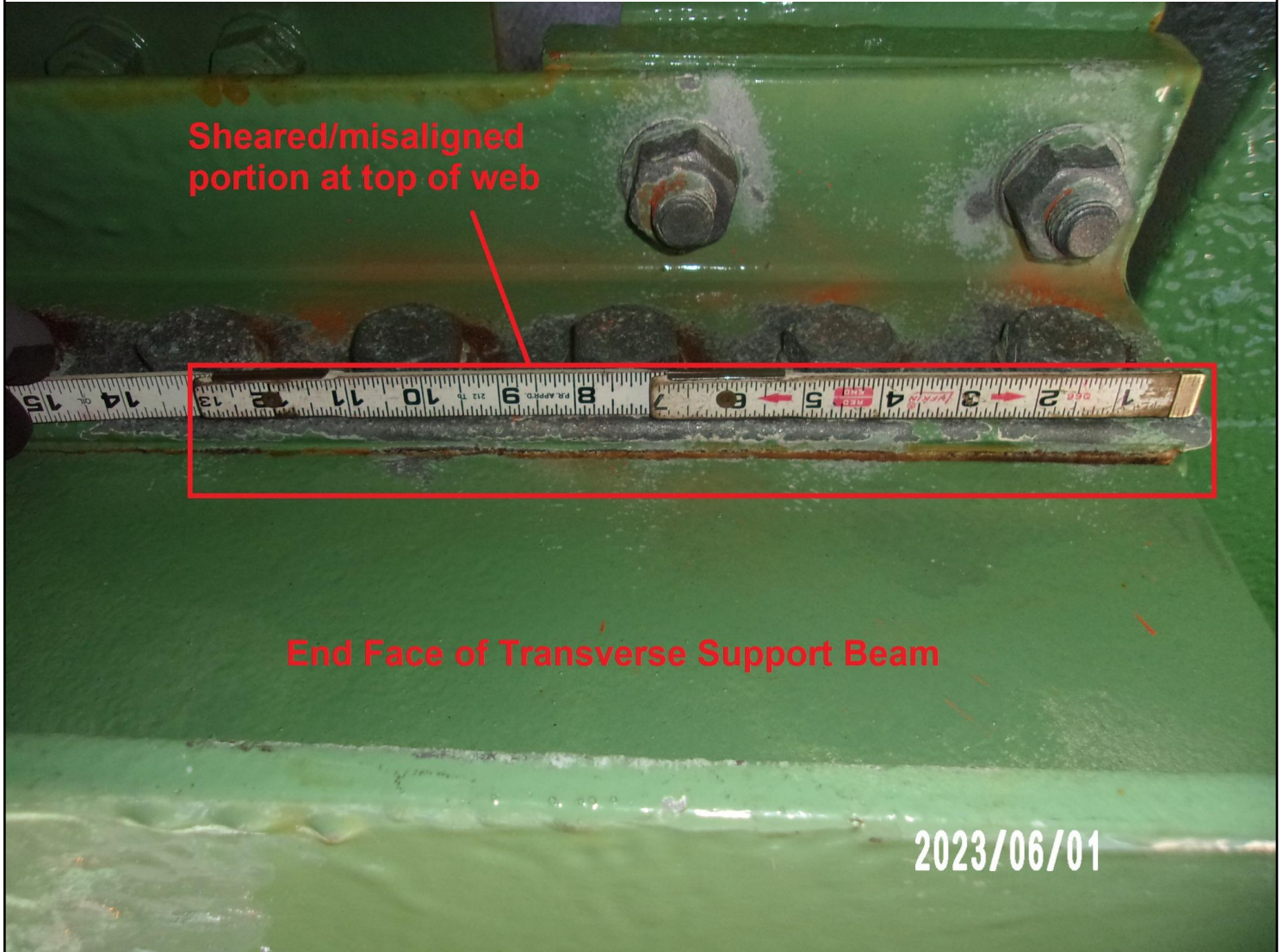
Photo Filename: 23_113_7431.JPG



Attachment Description: The left end of the transverse support beam below Stringer S1 in Span 164 at Pier 164. The lower web of the support beam exhibits 4-1/2" long crack right above the bottom flange. Looking End and Right.

Photo Number: 6

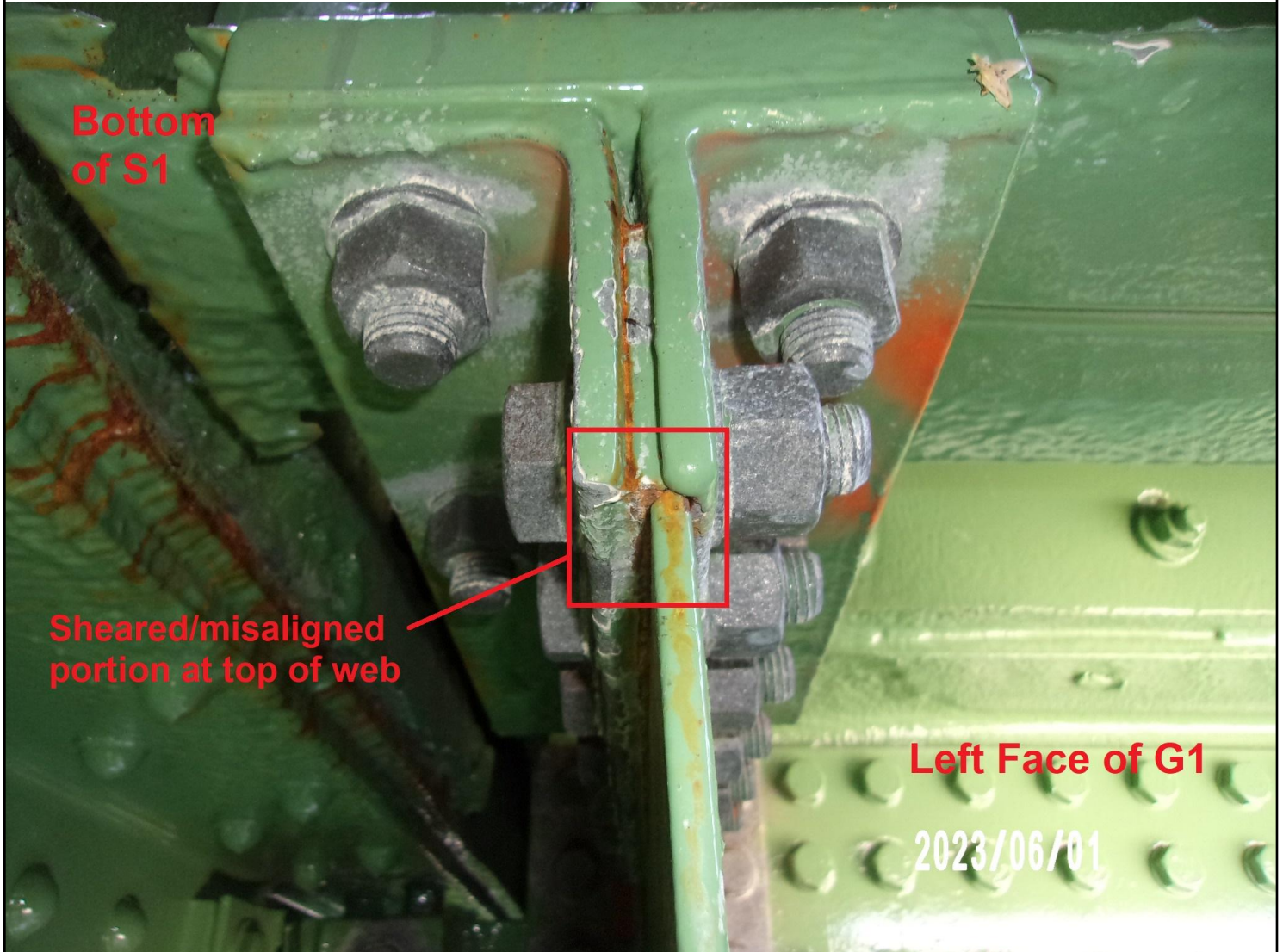
Photo Filename: 23_113_7434.JPG



Attachment Description: The end face of the transverse support beam below Stringer S1 in Span 164 at Pier 164. The upper web of the support beam right below the top flange angles exhibits sheared/misaligned portion of the web for 13" long. Looking Begin.

Photo Number: 7

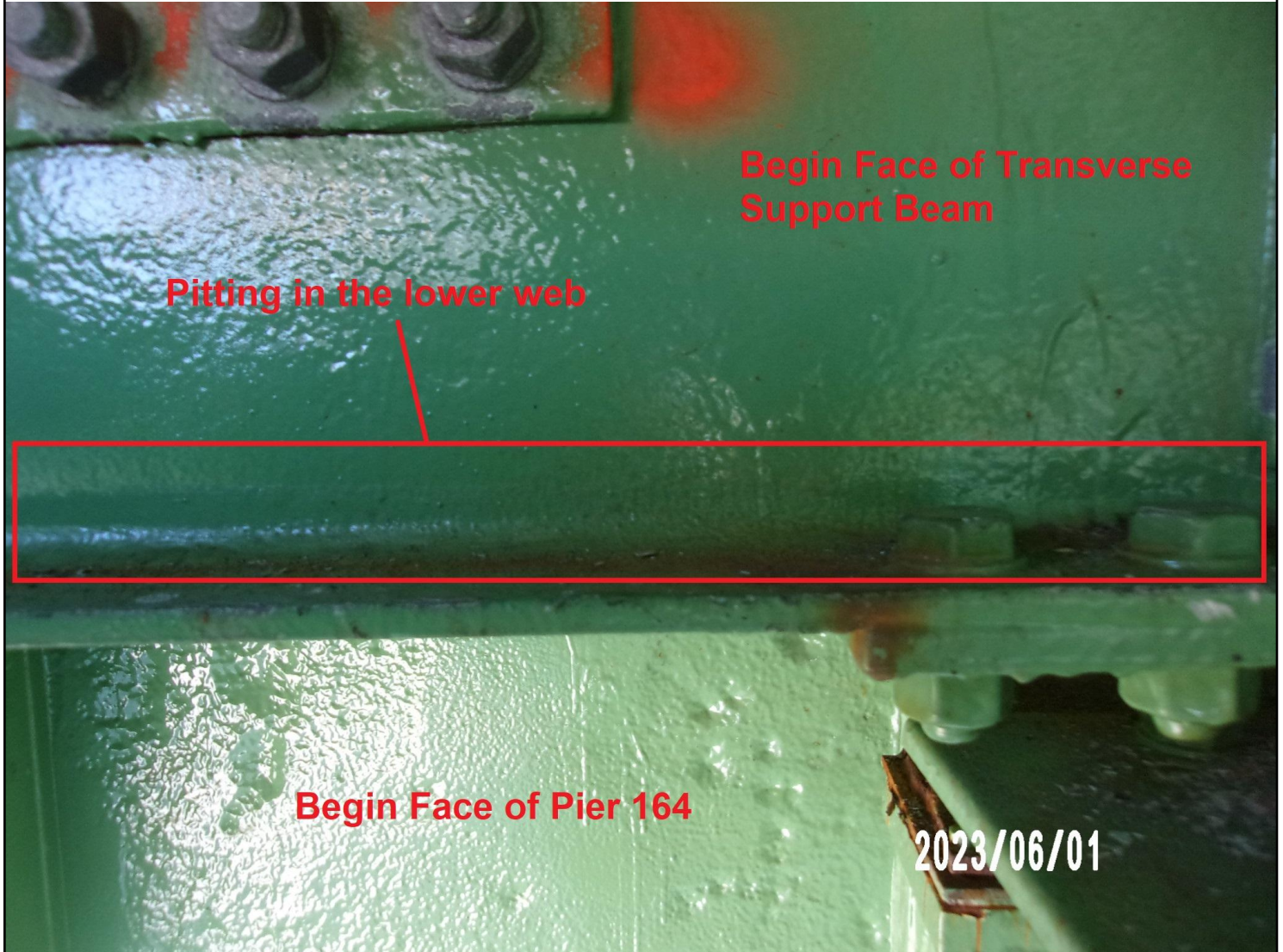
Photo Filename: 23_113_7435.JPG



Attachment Description: The left end of the transverse support beam below Stringer S1 in Span 164 at Pier 164. The upper web of the support beam right below the top flange angles exhibits sheared/misaligned portion of the web. Looking Right.

Photo Number: 8

Photo Filename: 23_113_7442.JPG



Attachment Description: The begin face of the transverse support beam below Stringer S1 in Span 164 at Pier 164. The lower web of the support beam above the bottom flange exhibits 1/16" pitting. Looking End.